

WHAT IS CLAIMED IS:

1. A suspended service recovery system for receiving a service non-continuously via a network from a service-providing apparatus deployed on the network, comprising:

5 a first terminal and a second terminal, both of which receive the service from the service-providing apparatus;
an analyzer configured to analyze a suspend-state if the service being provided to the first terminal via the network is suspended, and to extract required data in order to recover the suspend-state;

10 a representation unit configured to convert the required data extracted by the analyzer to state-description data according to a prescribed format;

a storing unit configured to store the state-description data;

a memory unit configured to memorize a recovery table which correlates each item of the state-description data with a data type that can be processed on the second
15 terminal;

a state-description transformer configured to transform the state-description data retrieved from the storing unit to recovery-state data based on the recovery table;
and

a service-recovering unit configured to recover the suspended service on the
20 second terminal based on the recovery-state data.

2. A suspended service recovery method for receiving a service non-continuously via a network from a service-providing apparatus deployed on the network using a first terminal and a second terminal, comprising the steps of:

25 (1) analyzing a suspend-state if the service being provided to the first terminal via the network is suspended, and extracting required data in order to recover the suspend-state;

(2) converting the required data extracted at a step (1) to state-description data according to a prescribed format;

(3) storing the state-description data;

(4) transforming the retrieved state-description data to recovery-state data
5 based on a recovery table which correlates each item of the state-description data with a data type that can be processed on the second terminal; and

(5) recovering the suspended service on the second terminal based on the recovery-state data.

10 3. A terminal for receiving a service non-continuously via a network from a service-providing apparatus deployed on the network, comprising:

an analyzer configured to analyze a suspend-state if a service being provided via the network is suspended, and to extract required data in order to recover the suspend-state; and

15 a transmitter configured to transmit the required data to the network.

4. A terminal according to claim 3, further comprising a representation unit to convert the required data extracted by the analyzer to state-description data according to a prescribed format, and wherein the transmitter transmits the state-description data in

20 lieu of the required data to the network.

5. A terminal for receiving a service non-continuously via a network from a service-providing apparatus deployed on the network, comprising a service-recovering unit configured to recover a suspend-state of the service which is suspended by another
25 terminal based on required data retrieved from the network.

6. A terminal for receiving a service non-continuously via a network from a

service-providing apparatus deployed on the network, comprising;

a retriever configured to retrieve state-description data in which required data to recover a suspend-state of a suspended service is converted according to a prescribed format;

5 a memory unit configured to memorize a recovery table which correlates each item of the state-description data with a data type that can be processed on another terminal;

a state-description transformer configured to transform the retrieved state-description data to a recovery-state data based on the recovery table; and

10 a service-recovering unit configured to recover the suspended service on the other terminal based on the recovery-state data.

7. A terminal according to claim 6, further comprising a resource determination unit configured to determine hardware or software resource executable in the other
15 terminal based on the recovery table.

8. A suspended service recovery apparatus for providing a service non-continuously to a first terminal and a second terminal via a network, comprising:

a state-description data retriever configured to retrieve state-description data in
20 which a suspend-state of a suspended service is converted according to a prescribed format;

a storing unit configured to store the retrieved state-description data; and

a state-description data transmitter configured to transmit the state-description data to the second terminal according to a request by the second terminal.

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9. A suspended service recovery apparatus according to claim 8, further comprising a representation unit configured to acquire the suspend-state if the service

being provided to the first terminal is suspended, and to convert required data to recover the suspend-state to the state-description data according to a prescribed format.

10. A suspended service recovery apparatus according to claim 8, further

5 comprising:

a memory unit configured to memorize a recovery table which correlates each item of the state-description data with a data type that can be processed on the second terminal; and

10 a state-description transformer configured to transform the state-description data retrieved from the storing unit to recovery-state data, which is utilized to recover the suspended service, based on the recovery table.

11. A computer program product to be executed by a computer for receiving a service non-continuously via a network from a service-providing apparatus deployed on the network using a first terminal and a second terminal, comprising the steps of:

15 (1) analyzing a suspend-state if the service being provided to the first terminal via the network is suspended, and extracting required data in order to recover the suspend-state;

(2) converting the required data extracted at a step (1) to state-description data
20 according to a prescribed format;

(3) storing the state-description data;

(4) transforming the retrieved state-description data to recovery-state data based on a recovery table which correlates each item of the state-description data with a data type that can be processed on the second terminal; and

25 (5) recovering the suspended service on the second terminal based on the recovery-state data.

12. A computer program product according to claim 11, wherein the state-description data is described in a text format using characters or symbols.

13. A computer program product according to claim 11, wherein at a step (4),
5 hardware or software resource executable in the second terminal is selected based on the recovery table.

14. A computer program product according to claim 11, wherein at a step (1) or a step (2), if the first terminal receives the service using a plurality of resources
10 configured by hardware or software, the required data is separated for the respective resources.

15. A computer program product according to claim 11, wherein at a step (4), the plurality of the state-description data is merged and the merged state-description data is
15 transformed to the recovery-state data, and

At a step (5), the service is recovered simultaneously using a plurality of resources configured by hardware or software.